International Journal of Economics, Business and Accounting Research (IJEBAR)
Peer Reviewed – International Journal
Vol-8, Issue-1, 2024 (IJEBAR)
E-ISSN: 2614-1280 P-ISSN 2622-4771
https://jurnal.stie-aas.ac.id/index.php/IJEBAR

THE INFLUENCE OF LIQUIDITY, LEVERAGE AND COMPANY SIZE ON MANUFACTURING COMPANY BOND RATINGS LISTED ON THE INDONESIAN STOCK EXCHANGE

Anita Erari
Fakultas Ekonomi dan Bisnis Universitas Cenderawasih
Email: aerari@yahoo.com

Abstract: *This research is motivated by the importance of bond ratings of manufacturing companies listed on the Indonesia Stock Exchange. This research aims to determine and analyze the influence of liquidity, leverage and company size on the bond ratings of manufacturing companies listed on the Indonesian Stock Exchange. This research uses descriptive analysis and logistic regression analysis. Analysis was carried out with the help of the SPSS program. The stages in conducting hypothesis testing according to (Ghozali, 2016) are testing the feasibility of the regression model, overall model fit, and coefficient of determination (R2). Hypothesis testing includes the Partial Test (Wald Test) and Dominant Variable Test. The results of this research reveal 1) Liquidity as proxied by the current ratio (CR) has a positive and significant effect on bond ratings in manufacturing companies listed on the Indonesia Stock Exchange in 2019-2022, 2) Leverage as proxied by the debt to equity ratio (DER) has an effect insignificantly positive on the bond ratings of manufacturing companies listed on the Indonesia Stock Exchange in 2019-2022, 3) Company size calculated using the natural logarithm by looking at total assets has an insignificant negative effect on the bond ratings of manufacturing companies listed on the Indonesia Stock Exchange in 2019-2022. 2019-2022, and 4) Liquidity which has a dominant influence on the bond ratings of manufacturing companies listed on the Indonesia Stock Exchange in 2019-2022.*

Keywords: *Liquidity, Leverage, Company Size and Bond Rating*

1. Introduction

Capital markets have an important role in a country's economy. Law of the Republic of Indonesia no. 8 of 1995 concerning Capital Markets, defines capital markets as activities related to public offerings and securities trading, public companies related to the securities they issue, as well as institutions and professions related to securities. The capital market acts as a link between investors and companies or government institutions through trading in long-term financial instruments, such as bonds, shares and so on (Martalena & Malinda, 2011).

The capital market is a market for various long-term financial instruments that can be bought and sold, including debt securities (bonds), equities (shares), mutual funds, derivative instruments and other instruments. The capital market is a means of funding for companies and other institutions, and as a means of investment activities (Martalena & Malinda, 2011). The capital market is a means that brings together parties who have surplus funds with parties who deficit funds, where the funds traded are long-term funds (Anoraga & Pakarti, 2008).

One of the financial instruments that is popular in investing and trading is bonds. Bonds are transferable medium to long term debt securities, which contain a promise from the issuing party

to pay compensation in the form of interest over a certain period and repay the principal at a predetermined time to the bond buyer (Indonesian Stock Exchange, 2023). According to (MP Sari, 2007) Bonds are a source of company or government funding in the form of long-term debt securities issued with a certain value and a certain maturity time.

The form of funding that a company can use to finance its investment is by issuing bonds. Bonds are a type of debt capital that is traded in the capital market. Bonds are long-term financial instruments that can be traded between investors. In other words, bonds are investment products, which of course are capable of providing a certain level of risk or loss, apart from the potential for relatively fixed returns (Ekananda, 2021). Investing in bonds is very profitable compared to investing in shares because investors who buy shares do not necessarily get regular company income.

This is of course different from investing in bonds which provide a fixed income and a predetermined maturity date, so shares have a greater risk than bonds (Kustiyaningrum et al., 2017). It is said that investing in bonds is safer than investing in shares because if the company is liquidated, bond holders have priority over company assets. This happens because there is a contractual agreement between the company and investors to pay off the bonds that have been purchased (Mauludina, 2022).

Before being offered, bonds must be rated by a rating agency. Bond rating agencies are independent institutions that provide rating information regarding the security of a bond for investors. The securities rating agencies in Indonesia and recognized by the Financial Services Authority are PT Fitch Rating Indonesia and PT Pefindo (Indonesian Securities Rating). However, in this research the researcher will refer to the bond ratings issued by PT Pefindo. This is because PT Pefindo has ranked more than 700 companies (Ridwan, 2020). PT. Pefindo is a private limited liability company founded on the initiative of Bapepam-LK and Bank Indonesia and is a supporting institution for the Indonesian Capital Market that works objectively and independently (Mauludina, 2022). With so many issuers using PT Pefindo as a bond rating agency, this shows that many companies have high trust in the rating agency. The ratings given by rating agencies can be categorized into two, namely investment grade (AAA, AA+, AA, AA-, A+, A, A-, BBB+, BBB and BBB-) and non-investment grade (BB+, BB, BB-, B+, B, B-, CCC and D). Bond ratings reflect a company's creditworthiness to be able to pay obligations related to a particular debt security. Investment grade is a category that a company or country is considered to have sufficient ability to pay off its debts. So, for investors who are looking for a safe investment, they generally choose an investment grade rating. Non-investment grade is a category where a company is said to be less suitable for investors to invest in because the company's ability to pay off its debt is insufficient (Mauludina, 2022).

Investing in bonds is relatively safer, but bonds also have risks, namely default risk, which is a condition where the issuer does not fulfill its obligations, namely non-payment of interest and principal (IP Sari, 2016). Such as the rating of Bond I/2013 and sukuk ijarah I/2013 of PT Tiga Pilar Sejahtera Food Tbk (AISA) whose ratings were lowered by PT. Pefindo from "idCCC" to "idD" in connection with the company's inability to pay sukuk coupons which mature on July 19 2018. This can raise doubts and questions whether the ratings carried out by rating agents in Indonesia are appropriate and accurate by the parties. investors. One of the reasons why the bonds issued by the rating agency are biased is because the rating agency does not monitor the company's performance every day (NMSK Sari & Badjra, 2016). Therefore, there is a need for an assessment of financial performance by looking at the financial reports of companies that want to sell their bonds, so that payment defaults can be minimized.

Kamstra et al, (2001) say that the factors that influence bond ratings are financial and non-financial factors. Financial factors include liquidity ratios, solvency ratios, profitability ratios, leverage ratios, company size and company growth. Meanwhile, non-financial factors include bond age, security, and auditor reputation. This research uses several variables that have an influence on bond ratings, namely liquidity ratios, leverage, and company size. Researchers use these variables because previous research results still contain research gaps.

The first variable is the liquidity variable. Liquidity is a company's ability to meet short-term financial obligations on time. The higher the company's liquidity level, the higher the bond rating given to the company. A high liquidity ratio indicates that the company's bonds fall into the category *investment-grade,* because current assets that are higher than current liabilities indicate the company's ability to fulfill short-term obligations to investors on time. The liquidity ratio proxy used is *Current Ratio* (CR). Research variable *Current Ratio* (CR) carried out by (Mauludina, 2022) shows that the liquidity ratio is proxied by *Current Ratio* (CR) has a significant effect on bond ratings. This is not in accordance with the research results presented by (Kaltsum & Anggraini, 2021) which says otherwise. The level of liquidity assesses the entity's ability to pay debts with the assets owned. Liquidity is represented by *current ratio* assess the entity's ability to pay current debts with its current assets. Meanwhile, bond maturities vary, namely short, medium and long term. So a company with a high level of liquidity *(current ratio*) which is high, it is not certain that you will be able to pay the bond obligations at maturity because the bonds may be medium or long term. Another cause is because there are still current assets in the form of inventory of merchandise which may not be able to be cashed in when the bond matures so that the company has the potential to be unable to pay the principal and interest on the maturing bond (Kaltsum & Anggraini, 2021).

The second variable, namely *leverage*. *Leverage* shows the proportion of debt used to finance investments as proxied by the debt to equity ratio (DER). If the proportion of debt owned by the company is higher than equity, the company tends to have a low ability to fulfill its obligations. Research conducted by (Latif, 2022)shows that the projected leverage with the debt equity ratio (DER) has no influence on the bond rating. These results are different from research (Mardiana & Suryandani, 2021)states that leverage calculated by the debt to equity ratio (DER) has a significant positive effect on bond ratings. This happens because not all companies with a high level of leverage will experience default because if the company is able to manage the funds it borrows well, it will be able to generate profits (Mardiana & Suryandani, 2021).

The third variable is company size. Firm size, which is measured by the company's total assets, will influence the company's bond rating. The size of the company can determine the level of ease with which the company obtains funds from the capital market. The results of research conducted by (Darma & Sulistiyani, 2019) proves that there is a significant positive relationship with company size. These results are not in line with research (Kaltsum & Anggraini, 2021) which states that company size does not have a significant influence on bond ratings. The lack of influence on company size is because the measurement for bond ratings is seen from the obligor's ability to pay its debts, not from its sales side. So whatever sales the entity generates will have no effect on the bond level (Kaltsum & Anggraini, 2021).

On research (Darmawan et al., 2020) using indicators of Liquidity, Leverage, Bond Age and Company Size. The research results show that Liquidity has a positive and significant effect on bond ratings, Leverage has a positive and significant effect on bond ratings and Company Size has a negative and insignificant effect on bond ratings.

Based on the description above, researchers are interested in conducting this research because there are still many variations in the results obtained regarding financial performance

variables that influence bond ratings. So further research needs to be conducted regarding what variables influence bond ratings. The difference between this research and previous research is the research object and year of research. The object of this research is a manufacturing company listed on the BEI and ranked by PT. Pefindo. The research object was chosen to avoid bias due to differences in industry characteristics. The research period carried out in this study was four years, namely from 2019-2022. The four-year period was chosen because it included the most recent research.

Based on the background above, the title we want to take is: "The Influence of Liquidity, Leverage and Company Size on the Bond Ratings of Manufacturing Companies Listed on the Indonesian Stock Exchange for the 2019-2022 Period".

2. Research Methods

This research uses descriptive analysis and logistic regression analysis. Descriptive statistics provide an overview or description of data seen from the mean, standard deviation, variance, maximum, minimum, sum, range, kurtosis and skewness (Ghozali, 2016). Logistic regression analysis to test the influence of liquidity ratios, leverage and company size on bond ratings. Logistic regression does not require the assumption of normality of data on the independent variables. Logit regression is used to test whether the probability of occurrence of the dependent variable can be predicted by the independent variable (Ghozali, 2016). Analysis was carried out with the help of the SPSS program. The stages in conducting hypothesis testing according to (Ghozali, 2016) are testing the feasibility of the regression model, overall model fit, and coefficient of determination (R2). Hypothesis testing includes the Partial Test (Wald Test) and Dominant Variable Test.

3. Results and Discussion

3.1. Results

Data analysis

Ratio Analysis

Liquidity Ratio

In this research, liquidity is proxied using the current ratio. *Current Ratio* at the company PT. Charoen Pokphand Indonesia, Tbk. (CPIN) in 2022 can be calculated using the following formula:

$$Current\ Ratio = \frac{Current\ Assets}{Current\ Liabilities}\ x\ 100$$

$$Current\ Ratio = \frac{18.031.436}{10.109.335}\ x\ 100$$

$$= 178.36$$

Leverage Ratio

Leverage ratio is a ratio used to measure the extent to which a company's assets are funded by debt. Debt to Equity Ratio (DER) is the ratio of total debt to total equity or calculates the percentage of total funds provided by creditors. Debt to Equity Ratio (DER) in the company PT. Charoen Pokphand Indonesia Tbk. (CPIN) in 2022 can be calculated using the following formula:

$$Debt\ to\ Equity\ Ratio = \frac{Total\ Debt}{Total\ Equity}\ x\ 100$$

$$Debt\ to\ Equity\ Ratio = \frac{13.520.331}{26.327214}\ x\ 100$$
$$= \mathbf{51.35}$$

Company Size

Company size is a measure of the size of the company as seen from the equity value, sales value and total asset value owned by the company. To find out company size, it can be proxied using the natural logarithm of total assets. The following is a calculation of company sizeat the company PT. Charoen Pokphand Indonesia Tbk. (CPIN) in 2022 can be calculated using the following formula:

$$Ukuran\ Perusahaan = Ln\ (Total\ Asset)$$
$$= Ln\ (39{,}847{,}545)$$
$$= 17.50$$

Bond Ratings

Bond rating is a study of a company's creditworthiness, or its ability to fulfill all its financial obligations. This study refers to the assessment of the company's main risks, namely industrial risk, business risk and financial risk (Pefindo, 2023).

Table 1.
Bond Ratings

No	Code	Company name	Investment-Grade	Non-Investment Grade
1	CPIN	PT. Charoen Pokphand Indonesia Tbk.	1	
2	JPFA	PT. Japfa Comfeed Indonesia Tbk.	1	
3	PLAY	PT. Malindo Feedmill Tbk.	1	
4	SMBR	PT. Semen Batu Raja Tbk.	1	
5	SMGR	PT. Semen Indonesia Tbk.	1	
6	AMFG	PT. Asahimas Flat Glass Tbk.	1	
7	ACR	PT. AKR Corporindo Tbk.	1	
8	TPIA	PT. Chandra Asri Petrochemical Tbk.	1	
9	LTLS	PT. Lautan Luas Tbk.	1	
10	MOLI	PT. Madusari Murni Indah Tbk.	1	
11	UNIC	PT. Unggul Indah Cahaya Tbk.	1	
12	ISSP	PT. Steel Pipe Industry Of Indonesia Tbk.	1	
13	GDST	PT. Gunawan Dianjaya Steel Tbk.	1	
14	GGRP	PT. Gunung Raja Paksi Tbk.	1	
15	IMPC	PT. Impact Pratama Industri Tbk.	1	
16	INKP	PT. Indah Kiat Pulp & Paper Tbk.	1	
17	TKIM	PT. Tjiwi Kimia Tbk Paper Factory.	1	
18	INDF	PT. Indofood Sukses Makmur Tbk.	1	
19	MYOR	PT. Mayora Indah Tbk.	1	
20	ULTJ	PT. Ultrajaya Milk Industry & Trading Company Tbk.	1	
21	STTP	PT. Siantar Top Tbk.	1	

22	BREAD	PT. Nippon Indosari Corpindo Tbk.	1	
23	AISA	PT. FKS Food Sejahtera Tbk.		0
24	BEEF	PT. Estika Tata Tiara Tbk.	1	
25	TGKA	PT. Tigaraksa Satria Tbk.	1	
26	WOOD	PT. Integra Indocabinet Tbk.	1	
27	KLBF	PT. Kalbe Farma Tbk.	1	
28	KAEF	PT. Kimia Farma Tbk.	1	
29	INAF	PT. Indofarma Tbk.	1	
30	PEHA	PT. Phapros Tbk.	1	
31	HMSP	PT. Hanjaya Mandala Sampoerna Tbk.	1	
32	RMBA	PT. Bentoel Indonesia Investama Tbk.	1	
33	HRTA	PT. Hartadinata Abadi Tbk.	1	
34	ASII	PT. Astra Indonesia Tbk.	1	
35	GJTL	PT. Gajah Tunggal Tbk.	1	
36	SMSM	PT. Selamat Perfect Tbk.	1	
37	VOKS	PT. Voksel Electric Tbk.	1	
38	RICY	PT. Ricky Putera Globalindo Tbk.		0
39	MPPA	PT. Sun Putera Prima	1	
40	MAPI	PT. Mitra Adiperkasa Tbk.	1	
41	INTA	PT. Intraco Penta Tbk.	1	
42	FISH	PT. FKS Multi Agro Tbk.	1	
43	ASGR	PT. Astra Graphia Tbk.	1	

Source: processed data, 2023

Based on Table 1 above, there are 43 companies used as samples in the research. In this study, the Bond Rating variable uses a dummy variable, giving a value of 1 in the investment-grade category and a value of 0 for the non-investment grade category. Based on these results, there are 41 companies that are categorized as investment-grade and there are 2 companies that are categorized as non-investment grade.

Statistical Analysis

Descriptive statistics

Based on SPSS processed data which includes independent variables, namely liquidity (X1), leverage (X2) and company size (X3), the maximum value, minimum value, average and standard deviation of each variable can be seen in Table 2, while the dependent variable namely the bond rating (Y) is not included in the descriptive statistical calculations because the dependent variable has a nominal scale.

Table 2.
Descriptive Statistics

Descriptive Statistics					
	N	**Min**	**Max**	**Mean**	**Std. Dev**
Current Ratio	172	15.82	1275.72	205.6787	157.92085
Debt to Equity Ratio	172	9.87	9250.04	217.4335	756.89163
Company Size	172	12.73	30.94	21.0789	5.73196

Valid N (listwise)	172				

Source: processed data, 2023

Based on the results of liquidity statistics proxied by the current ratio, it has a minimum value of 15.82 while the maximum value is 1275.72, the mean value is 205.6787 with a standard deviation of 157.92085. The minimum value of the leverage variable is proxied by Debt to Equity Ratio of 9.87 while the maximum value is 9250.04, the mean value is 217.4335 with a standard deviation of 756.89163. The minimum value for company size is 12.73, while the maximum value for company size is 30.94, the mean value is 21.0789 with a standard deviation of 5.73196.

The nominal scale is a scale for measuring categories or groups, Ghozali (2016). For the sample with the bond rating variable (Y) it can be seen in Table 3 below:

Table 3.
Y Variable Frequency Statistics

Bond Ratings					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Non Investment Grade	8	4.7	4.7	4.7
	Investment Grade	164	95.3	95.3	100.0
	Total	172	100.0	100.0	

Source: processed data, 2023

Based on the results of statistical tests, companies that received a bond rating in the investment-grade category (idAAA, idAA, idA, idBBB) were given the code 1, while companies that received a bond rating in the non-investment grade category (idBB, idB, idCCC, idD) were given the code 0 Based on the resulting frequency table, there are 164 observations (95.3%) of companies that received a bond rating in the investment grade category, while there are 8 observations (4.7%) of companies that received a bond rating in the non-investment grade category.

Logistic Regression Results

Model Feasibility Test (*Hosmer and Lemeshow's Goodness of Fit*)

This test is carried out to test the null hypothesis that the empirical data is suitable or in accordance with the model (there is no difference between the model and the data so that the model can be said to be*fit*). Ghozali (2016) If value Hosmer and Lemeshow's Goodness of Fit Test statistics 0.05 $\leq$ meaning that there is a significant difference between the model and the observations, it can be said to be rejected. if the value of Hosmer and Lemeshow's Goodness of Fit statistic is 0.05, it means that the model is able to predict the observed value, $H_0 \geq$ then it can be said H_0 accepted.

Table 4.
Hosmer and Lemeshow Test

Hosmer and Lemeshow Test			
Step	Chi-square	Df	Sig.
1	10,038	8	,262

Source: processed data, 2023

Based on the results of logistic regression in Table 4, the statistical values are shown *Hosmer and Lemeshow Test*of 10.038 with a significant probability of 0.262. This larger significant value (0.262 > 0.05) indicates that the model in this study is acceptable because it matches the observation data.

Test the Whole Model (*Overall Model Fit*)

The entire model is assessed by comparing values between -2*Likehood log*at the beginning (block number = 0) with a value of -2*Likehood log*at the end (block number = 1).

Table 5.
Block 0: Beginning Block

Iteration Historya,b,c			
Iteration		-2 Log likelihood	Coefficients
			Constant
Step 0	1	80,971	1,814
	2	66,317	2,591
	3	64,751	2,949
	4	64,711	3,018
	5	64,711	3,020
	6	64,711	3,020
a. Constant is included in the model.			
b. Initial -2 Log Likelihood: 64,711			
c. Estimation terminated at iteration number 6 because parameter estimates changed by less than .001.			

Source: processed data, 2023

Table 6.
Block 1 : Method = Enter

Iteration Historya,b,c,d						
Iteration		-2 Log likelihood	Coefficients			
			Constant	CR	DER	Uk. Persh
Step 1	1	80.143	1,732	,001	,000	-.003
	2	63,847	2,320	,002	,000	-.008
	3	59,747	2,249	,006	,000	-.017
	4	58,166	1,828	.011	,000	-.026
	5	57,941	1,607	.013	,000	-.027
	6	57,937	1,575	.013	,000	-.027
	7	57,937	1,574	.014	,000	-.027
a. Method: Enter						
b. Constant is included in the model.						
c. Initial -2 Log Likelihood: 64,711						
d. Estimation terminated at iteration number 7 because parameter estimates changed by less than .001.						

Source: processed data, 2023

Based on Table 6 (Block 0: Beginning) and Table 4.10 (Block 1: Method=Enter) above are the results of data processing for all companies. The -2log Likelihood value in the table (Block 0=Beginning) is 64,711. Meanwhile, in the table (Block 1: method=enter) where the independent variable is entered into the model, the -2log Likelihood value changes to 57,937 or there is a decrease of 6,774. This decrease in the -2log likelihood value shows that the regression model for research on all companies is a good regression model or it can also be said that the hypothesized model fits the data, and the addition of independent variables to the model improves the model fit.

Testing the Coefficient of Determination (*Nagel Kagel Value (R^2)*)

This test is carried out to find out how much the combination of independent variables is able to explain the dependent variable.

Table 7.
Nagel Kagel Value

Model Summary			
Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	57.937a	,039	.123
a. Estimation terminated at iteration number 7 because parameter estimates changed by less than .001.			

Source: processed data, 2023

Based on Table 7 above, the Nagelkerke R Square value is 0.123. This value shows that the variability of the dependent variable which can be explained by the variability of the independent variable is 12.3%. Meanwhile, the remaining 87.7% is explained by other variables outside the research model.

Hypothesis testing

Partial Test (Wald Test)

In logistic regression, partial testing is shown on variables in the equation which aims to determine the significant constant of each independent variable included in the model.

Table 8.
Logistic Regression Analysis

Variables in the Equation							
		B	S.E	Wald	df	Sig.	Exp(B)
Step 1a	CR	.014	,006	4,430	1	,035	1,014
	DER	.0001	,000	,092	1	,762	1,000
	Uk. Persh	-.027	,069	,151	1	,697	,974
	Constant	1,574	1,593	,976	1	,323	4,828
a. Variable(s) entered on step 1: Current Ratio, Debt to Equity Ratio, Company Size.							

Source: processed data, 2023

Based on the results of the logistic regression test in Table 8 above, the regression equation obtained is as follows: **Y = 1.574 + 0.014X1 + 0.001X2 – 0.027X3 + e**

From the results of logistic regression testing, it can be interpreted as follows:

1) b0 = 1.574
   The constanta value of the regression equation is 1.574, indicating that if the variables of liquidity, leverage and company size remain constant, then the probability that the bond rating will increase is 1.574.
2) bX1 = 0.014
   The coefficient value of the liquidity variable is positive at 0.014, so the liquidity variable has a positive effect on bond ratings. Based on the table above, it is known that the sig value of the liquidity variable is 0.035<0.05, so hypothesis 1 which states that liquidity has a significant effect (accepted), means that the liquidity variable has a significant effect on bond ratings. So it can be concluded that the liquidity variable has a positive and significant effect on bond ratings.
3) bX2 = 0.0001

The coefficient value of the leverage variable is positive at 0.001, so the leverage variable has a positive effect on bond ratings. Based on the table above, it is known that the sig value of the leverage variable is 0.762 > 0.05, so hypothesis 2 which states that leverage has a significant effect (is rejected), means that the liquidity variable does not have a significant effect on bond ratings. So it can be concluded that the leverage variable has an insignificant positive effect on bond ratings.

4) bX3 = - 0.027

The coefficient value of the company size variable is negative - 0.027, so the company size variable has a negative effect on bond ratings. Based on the table above, it is known that the sig value of the company size variable is 0.697 > 0.05, so hypothesis 3 which states that the company size variable has a significant effect on bond ratings (rejected) means that the company size variable has no significant effect on bond ratings. So it can be concluded that the company size variable has an insignificant negative effect on bond ratings.

Dominant Variable Test

To find out the variable that has the most dominant influence among the liquidity, leverage and company size variables, it can be seen from each value of the variable that has the largest standard beta coefficient (β) value.

Table 9.
Dominant Variable

Variables in the Equation							
		B	S.E	Wald	Df	Sig.	Exp(B)
Step 1a	CR	.014	,006	4,430	1	,035	1,014
	DER	.0001	,000	,092	1	,762	1,000
	Uk. Persh	-.027	,069	,151	1	,697	,974
	Constant	1,574	1,593	,976	1	,323	4,828
a. Variable(s) entered on step 1: Current Ratio, Debt to Equity Ratio, Company Size.							

Source: processed data, 2023

Based on Table 9 above, it can be seen that the standard coefficient beta (β) value for the liquidity variable (X1) is 0.014, leverage (X2) is 0.0001, and company size (X3) is -0.027, so hypothesis 4 states that the variable company size which has a dominant influence (rejected). This shows that the liquidity variable (X1) has the largest standard coefficient beta (β) value, namely 0.014. So it can be concluded that the independent variable that has the most dominant influence is the liquidity variable.

3.2. Discussion

The Effect of Liquidity on Bond Ratings

The results of the logistic regression test show that the liquidity variable partially influences bond ratings. Results this shows that the liquidity ratio is proxied by current ratio significant effect on bond ratings. The liquidity ratio shows the company's ability to pay short-term obligations on time. A high level of liquidity indicates the company's strong financial condition so that finances will influence bond rating predictions.

A company that is able to fulfill its financial obligations on time can give a signal to investors that the company is liquid and has assets greater than its current liabilities (Hasan & Dana, 2019). The higher the company's liquidity level, the better the bond rating given. Information in the form of liquidity can be used as a signal by investors. If liquidity is high, it will be a good signal for investors, because high liquidity shows the company's ability to pay

short-term obligations smoothly. The condition of the company can attract investors to invest their capital in the company (Sari & Badjra, 2016).

This shows that the company has good financial capabilities in meeting short-term and long-term obligations so that it can reduce default risk and increase the bond rating of a company and vice versa, if the level of liquidity is lower, the lower the bond rating will be. The results of this research support the results of previous research, namely (Mardiana & Suryandani, 2021), (Darmawan et al., 2020), and (Sulistiani & Meutia, 2021) which states that liquidity has a significant positive effect on bond ratings.

The Effect of Leverage on Bond Ratings

The second hypothesis in this research is *leverage* which is proxied by Debt to Equity Ratio (DER) has no effect on bond ratings. These results show that the ratio leverage which is proxied by Debt to Equity Ratio does not have a significant effect on bond ratings. This shows that leverage high levels in a company can indicate its height default risk company finances, if the proportion of debt owned by the company is higher than equity, the company tends to have a low ability to fulfill its obligations.

Not all companies with levels leverage those who are high will experience default if the company is able to manage the funds it borrows properly and correctly so that the company can generate profits, for example the company uses the debt to add new products or open a new factory so that by using the debt it is able to generate profits that are likely to be greater. from the loan. So on the one hand, a high increase in debt can increase the potential for losses or bankruptcy that the company cannot avoid, but on the other hand, an increase in debt can also bring benefits, namely additional capital to develop the company (Mardiana & Suryandani, 2021). In accordance with signal theory according to (Spence, 1973) in (Darmawan et al., 2020) states that value leverage a high value for a company will provide a positive signal to investors to invest their capital in the company. However, high debt use actually indicates a high default risk for a company. The results of this research are in accordance with the results of research conducted by (Mardiana & Suryandani, 2021), (Darma & Sulistiyani, 2019), and (Kepramareni et al., 2021) which shows the results that leverage has an insignificant positive effect on bond ratings.

The Influence of Company Size on Bond Ratings

The third hypothesis in this research is that company size which is formulated as (Ln) has no effect on bond ratings. These results indicate that company size does not have a significant effect on bond ratings. Company size is a description of the size of a company as shown by the average total assets of the company. Companies with large total assets are preferred by investors, because large companies have large assets as collateral so that risks can be minimized compared to small companies. But if a small company has good performance, it is still liked by investors. Companies despite their size *(size)* those that are small but have good performance will still be liked by investors and have a good bond rating. Conversely, if a company has a large size in terms of total assets, but has poor performance, then its bond rating will drop (Arafah, 2019).

The size of the company has a negative influence, which means that low total assets can result in a low rating for the bonds to be issued. In order to get a high bond rating, the company must also have large total assets. The greater the company's total assets, the better its ability to pay off long-term debt. The larger the assets, the easier it will be to guarantee bond issuance, with the large total assets certainly reflecting a healthy company because its business activities have grown significantly, which is reflected in sustainable asset growth. This is because large

total assets can be used as collateral for bond issuance, this information can be a useful signal to increase investor confidence in investment risks (Latif, 2022). These results are in accordance with research conducted by (M. & L. Sari, 2021), (Latif, 2022), and (Meutianingrum Juniati Farah & Permani Ratih, 2022) which states that company size has an insignificant negative effect on bond ratings.

Liquidity Ratios That Have a Dominant Influence on Bond Ratings

Based on the results of the logistic regression test, it can be seen that the standard coefficient beta (β) value is the largest in the liquidity variableso that the independent variable that has the most dominant influence is the liquidity variable. The liquidity ratio is a ratio that shows how the company is able to meet its current obligations with the current assets it owns. A company that is able to fulfill its financial obligations on time means that the company is liquid and has current assets greater than its current liabilities. This is because the current assets owned are able to pay off the company's short-term liabilities. This research shows that the liquidity ratio variable as measured by the current ratio has the most dominant influence on bond ratings. A high level of liquidity ratio indicates that the company is in a strong condition and tends to be able to fulfill its obligations and the company's performance will look good. So that investors can be entrusted to provide debt to the company, the more investors who are entrusted to provide debt will be able to increase the company's bond rating.

The results of this research are in accordance with research conducted by (Amellia et al, 2019) which states that liquidity has a significant effect on bond ratings. The current ratio value shows the company's ability to pay short-term debt with its current assets. Thus, if the company's liquidity is good, it means the company is able to pay debts that will soon mature with the current assets it has. Meanwhile, the bond rating shows the risk of the bond. Risk is related to the ability of the company issuing the bond to pay the principal and interest at maturity. This means that the better the liquidity ratio, the lower the risk of the company being unable to pay the principal and interest due. This current ratio is also directly related to how a company can fulfill its obligations. This indicates that the current ratio information contained in the financial statements of bond issuing companies is truly useful for investors and rating agents in rating corporate bonds.

4. Conclusion

Based on the results of data analysis tests regarding the influence of liquidity, leverage and company size on the bond ratings of manufacturing companies listed on the Indonesia Stock Exchange in 2019-2022, it can be concluded that: 1) Liquidity as proxied by the current ratio (CR) has a positive and significant effect on the ratings bonds in manufacturing companies listed on the Indonesian Stock Exchange in 2019-2022. This means that the company has good ability from a financial perspective to fulfill short-term and long-term obligations so that it can reduce default risk and can increase the bond rating of a company and vice versa, if the lower the level of liquidity, the lower the bond rating will be, 2) Leverage which is proxied by debt to equity ratio (DER) has a positive and insignificant effect on the bond ratings of manufacturing companies listed on the Indonesia Stock Exchange in 2019-2022. This means that high leverage in a company can indicate a high default risk in the company's finances. If the proportion of debt owned by the company is higher than equity, the company tends to have a low ability to fulfill its obligations. 3) Company size which is calculated using the natural logarithm by looking at total assets has an effect. negative is not significant for the bond ratings of manufacturing companies listed on the Indonesia Stock Exchange in 2019-2022. This means that low total assets can result

in a low rating for the bonds to be issued. In order to get a high bond rating, the company must also have large total assets. The greater the company's total assets will reflect its good ability to pay off long-term debt, and 4) the liquidity variable which has a dominant influence on the bond ratings of manufacturing companies listed on the Indonesia Stock Exchange in 2019-2022. This means that a high level of liquidity ratio indicates that the company is in a strong condition and tends to be able to fulfill its obligations and the company's performance will look good. So that investors can be entrusted to provide debt to the company, the more investors who are entrusted to provide debt will be able to increase the company's bond rating.

Based on the conclusions above, there are several suggestions that can be put forward through this research, namely as follows: 1) For Investors.It is hoped that it can become a source of additional information for consideration in making investment decisions, and 2) For Further Researchers. It is hoped that it can increase the number of company samples and also add independent variables and use other objects listed on the IDX such as: banking, industrial and mining sectors.

References

Agustinus, S., & Yoewono, H. (2022). Pengaruh Ukuran Perusahaan, Reputasi Auditor, Umur Obligasi, Profitabilitas, Likuiditas, Ldr, Npl, Bopo Terhadap Peringkat Obligasi. *Ultimaccounting Jurnal Ilmu Akuntansi*, *14*(2), 264–280. https://doi.org/10.31937/akuntansi.v14i2.2745.

Amellia et, al (2017). (2019). *Prediksi Peringkat Obligasi Perusahaan Dengan Pendekatan Faktor Keuangan Dan Non Keuangan*. *4*(3), 206–219.

Anom, M. F. (2021). Pengaruh Likuiditas, Profitabilitas, Dan Leverage Terhadap Peringkat Obligasi Pada Sektor Perbankan Yang Terdaftar Di Pt Pefindo Periode 2014-2018. *Jurnal Ekobis Dewantara*, *4*(2), 108–121.

Anoraga, P., & Pakarti, P. (2008). *Pengantar Pasar Modal*. Rineka Cipta.

Arafah, S. (2019). Analisis faktor-faktor yang mempengaruhi peringkat obligasi pada faktor yang mempengaruhi peringkat obligasi pada perusahaan properti real estate dan kontruksi yang tertcatat di PT Pefindo tahun 2013-2017. *Simba*, 1000–1013.

Brigham, E, F., & Houston, J, F. (2011). *Dasar-Dasar Manajemen Keuangan. Terjemahan* (Edisi 10). Salemba Empat.

Darma, M., & Sulistiyani, T. (2019). Pengaruh Profitabilitas, Likuiditas, Ukuran Perusahaan Dan Leverage Terhadap Peringkat Obligasi Perusahaan Non Financial Yang Terdaftar Di Bei. *Jurnal FOKUS*, *09*(01), 92–105.

Darmawan, A., Fayed, A. F. Y., Bagis, F., & Bima, P. C. (2020). Akhmad Darmawan, Yudith Foran Al Fayed, Fatmah Bagis, Bima Cininttya Pratama (2020). In *Jurnal Manajemen2* (Vol. 14, Issue 2020).

Ekananda, M. (2021). *Manajemen Investasi*. PT Erlangga.

Fahmi, I. (2018). *Pengantar Manajemen Keuangan*. Alfabeta.

Ghozali, I. (2016). *Aplikasi Analisis Multivariete Dengan Program (IBM SPSS)* (Edisi 8). Universitas Dipenogoro.

Handayanu, R. S., & Agustono, D. R. (2009). Pengaruh Ukuran Perusahaan Terhadap. *Jurnal Bisnis Dan Akuntansi*, *11*(1), 33–56.

Harahap, S, S. (2018). *Analisis Kritis Atas Laporan Keuangan*. PT Raja Grafindo Persada.

Hasan, D. A., & Dana, I. M. (2018). *Pengaruh Profitabilitas, Likuiditas, Maturity, Dan Jamian Terhadap Peringkat Obligasi Tertinggi Pada Sektor Keuangan Di Bursa Efek Indonesia*. *7*(2), 643–673.

Jogiyanto, H. (2017). *Teori Portofolio dan Investasi Kesebelas*. BPFE.

Kaltsum, H., & Anggraini, D. T. (2021). Analisis Dampak Likuiditas, Leverage dan Ukuran Perusahaan Terhadap Peringkat Obligasi. *Jurnal Akuntansi Dan Governance*, *1*(2), 79. https://doi.org/10.24853/jago.1.2.79-88.

Kasmir. (2018). *Analisis Laporan Keuangan*. PT Raja Grafindo Persada.

Kepramareni, P., Pradnyawati, S. O., & Pratiwi, M. A. R. (2021). Laba Ditahan, Laba Operasi, Aliran Kas Operasi, Leverage, Profitabilitas Dan Pengaruhnya Pada Peringkat Obligasi. *Wacana Ekonomi (Jurnal Ekonomi, Bisnis Dan Akuntansi)*, *20*(1), 28–37. https://doi.org/10.22225/we.20.1.3158.28-37.

Kustiyaningrum, D., Nuraina, E., & Wijaya, A. L. (2017). Pengaruh Leverage, Likuiditas, Profitabilitas, Dan Umur Obligasi Terhadap Peringkat Obligasi (Studi Pada Perusahaan Terbuka Yang Terdaftar Di Bursa Efek Indonesia). *Assets: Jurnal Akuntansi Dan Pendidikan*, *5*(1), 25. https://doi.org/10.25273/jap.v5i1.1184.

Latif, A. (2022). *Research Paper Peringkat Obligasi Korporasi : Faktor Internal*. *06*(02), 210–224. https://doi.org/10.37253/gfa.v6i2.6848.

Mardiana, Y., & Suryandani, W. (2021). Pengaruh Likuiditas, Leverage, Profitabilitas, Dan Jaminan Terhadap Peringkat Obligasi Pada Perusahaan Non Keuangan Yang Diperingkat Oleh Pt Pefindo Yang Terdaftar Di Bursa Efek Indonesia. *Journal of Global Business and Management Review*, *3*(1), 30. https://doi.org/10.37253/jgbmr.v3i1.5089.

Martalena, & Malinda, M. (2011). *Pengantar Pasar Modal*. ANDI.

Mauludina, D. R. ; N. (2022). Pengaruh likuiditas, profitabilitas dan leverage terhadap agresivitas pajak. *Jurnal Cendekia Keuangan*, *1*(1), 27. https://doi.org/10.32503/jck.v1i1.2239.

Mestika, Z. (2008). *Metode Penelitian Kepustakaan*. Yayasan Obor Indonesia.

Meutianingrum Juniati Farah, & Permani Ratih. (2022). *Pengaruh Return on Assets (ROA), Debt to Equity Ratio (DER), dan Ukuran Perusahaan Terhadap Peringkat Obligasi Pada Perusahaan Jasa Yang*. *9*, 104–112.

Novia, P. (2021). Pengaruh Profitabilitas, Likuiditas, Leverage Dan Ukuran Perusahaan Terhadap Peringkat Obligasi Syariah Pada Perusahaan PT. Indosat (Persero) Tbk. *Jurnal Akuntansi Dan Governance*. http://repo.uinsatu.ac.id/id/eprint/22274.

Rianto, Felani, H., & Damayanti, A. (2021). Pengaruh Ukuran, Pertumbuhan Dan Umur Obligasi Perusahaan Terhadap Peringkat Obligasi (Studi Empiris Pada Perusahaan Properti dan Real Estate Yang Terdaftar di BEI periode 2015-2019). *RELEVAN: Jurnal Riset Akuntansi*, *1*(2), 83–98. https://journal.univpancasila.ac.id/index.php/RELEVAN/article/view/2270.

Ridwan, F. ; A. (2020). *Pengaruh Rasio Keuangan dan Pertumbuhan Perusahaan Terhadap Peringkat Obligasi Syariah*. *3*, 103–118. https://doi.org/10.21043/aktsar.v3i1.7629.

Riyanto, B. (2013). *Dasar-Dasar Pembelanjaan Perusahaan* (Edisi 4). BPFE.

Sari, I. P. (2016). *Analisis Kinerja Keuangan Untuk Memprediksi Peringkat Obligasi (Studi Pada Perusahaan Properti dan Konstruksi Bangunan Yang Terdaftar di Bursa Efek Indonesia Tahun 2012-2016)*. *147*(March), 11–40.

Sari, M. & L. (2021). *Pengaruh Leverage, Profitabilitas, Ukuran Perusahaan Dan Likuiditas Terhadap Peringkat Obligasi Pada Perusahaan Non Keuangan Yang Terdaftar Di Bursa Efek Indonesia (Studi Kasus Pada Tahun 2018-2021)*. *21*(April), 85–98.

Sari, M. P. (2007). Kemampuan Rasio Keuangan Sebagai Alat Untuk Memprediksi Peringkat Obligasi (PT. Pefindo). *Jurnal Bisnis Dan Ekonomi (JBE)*, *14*(2), 172–182. http://ojs.uajy.ac.id/index.php/kinerja/article/view/1392%0Ahttps://www.kci.go.kr/kciportal/ci/sereArticleSearch/ciSereArtiView.kci?sereArticleSearchBean.artiId=ART002408552%0Ahttp://journal.unesa.ac.id/php.index/aj%0Ahttp://jurnalmahasiswa.stiesia.ac.id/.

Sari, N. M. S. K., & Badjra, I. B. (2016). Pengaruh Likuiditas, Ukuran Perusahan, Leverage dan Jaminan terhadap Peringkat Obligasi pada Sektor Keuangan. *E-Jurnal Manajemen Universitas Udayana*, *5*(8), 5041–5069.

Sugiyono. (2013). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. Alfabeta.

Sulistiani & Meutia. (2021). Pengaruh Ukuran Perusahaan, Profitabilitas, Likuiditas, dan Leverage Terhadap Peringkat Obligasi Pada Perusahaan Jasa Keuangan Di Bursa Efek Indonesia. *Jurnal Ilmiah Mahasiswa Ekonomi Akuntansi (JIMEKA)*, *6*(2), 1. www.idx.co.id.

Sutrisno. (2009). *Manajemen Keuangan Teori, Konsep dan Aplikasi* (Edisi Pert). Ekonisia.

Tatang ary gumanti. (2011). Manajemen investasi. In *Manajemen Investasi*.

Wibowo, A. E., & Linawati, L. (2020). Pengaruh Likuiditas, Profitabilitas Dan Leverage Terhadap Peringkat Obligasi Perusahaan Di Indonesia. *Jurnal Riset Manajemen Sekolah Tinggi Ilmu Ekonomi Widya Wiwaha Program Magister Manajemen*, *7*(2), 143–152. https://doi.org/10.32477/jrm.v7i2.201.

Wiyono, D., & Purnama, T. E. (2021). Peringkat Sukuk. *Management Business Journal*, *4*(2), 973–989.